

### **REMARKS/ARGUMENTS**

In the Specification, the paragraphs [0058] and [0061] have been amended to correct minor editorial problems; no new matter has been introduced.

Claims 37-4 and 46 are pending in this application.

Claims 37, 40, 42, 44, and 46 have been amended in various particulars as indicated hereinabove.

Claim 45 has been cancelled without prejudice or disclaimer. Elements of Claim 45 have been incorporated into Claim 37.

Claim 37 had been objected to because of a typographical error. Claim 37 has been amended to overcome this objection.

Claim 40 had been objected to because the spelling of “sulfuric” is not consistent with the spelling of “sulphuric” in Claim 37. Claim 37 has been amended to overcome this objection.

Claims 37-39 and 45 had been rejected under 35 U.S.C. §103(a) over Schneider et al. (US 4,834,793). Claim 46 had been rejected under 35 U.S.C. §103(a) over Schneider et al. (US 4,834,793) in view of Frankiewicz et al. (US 4,132,758). These rejections are respectfully traversed for the following reasons.

Claim 37 comprises transferring NO from the oxidation reactor into a regeneration oxidizer; regenerating  $N_2O_3$  from the transferred NO using air or oxygen in the regeneration oxidizer; and transferring the regenerated  $N_2O_3$  into the oxidation reactor.

The publications cited by the Examiner in this Office Action are not teaching these elements.

“Schneider et al. does not teach regenerating  $\text{N}_2\text{O}_3$  in an individual regeneration oxidizer.” See pending Office Action, page 7.

In the pending Office Action, page 7, Examiner states that Frankiewicz teaches this in col. 4, lines 25-32.

Applicants respectfully disagree. In col. 4, lines 25-32, Frankiewicz refers to “this reaction” referring to the reaction  $\text{NO} + \frac{1}{2}\text{O}_2 \rightarrow \text{NO}_2$ , as shown in col. 4, lines 21-24. Frankiewicz does not teach regenerating  $\text{N}_2\text{O}_3$  for subsequent transfer into the oxidation reactor.

As explained hereinabove, transferring NO from the oxidation reactor into a regeneration oxidizer; regenerating  $\text{N}_2\text{O}_3$  from the transferred NO using air or oxygen in the regeneration oxidizer; and transferring the regenerated  $\text{N}_2\text{O}_3$  into the oxidation reactor is not taught or suggested in Schneider, Frankiewicz, any other publication cited by the Examiner in this Office Action, or their combination. Therefore, Claims 37-39 and 45 are patentable and non-obvious over Schneider and Frankiewicz under 35 U.S.C. §103(a) and should be allowed.

Claims 40 and 41 had been rejected under 35 U.S.C. §103(a) over Schneider et al. (US 4,834,793) in view of Somers et al. (US 2,315,988). This rejection is respectfully traversed for the following reasons.

Claims 40 and 41, as amended, comprise separating  $\text{N}_2\text{O}_3$  from  $\text{N}_2$  by absorbing the  $\text{N}_2\text{O}_3$  from a mix of gases comprising  $\text{N}_2$  and  $\text{N}_2\text{O}_3$  into a sulfuric acid solution and denitrating the sulfuric acid solution.

Such separating is not taught or suggested in Schneider, Somers, any other publication cited by the Examiner in this Office Action, or their combination. Therefore, Claims 40 and 41 are patentable and non-obvious over Schneider and Somers under 35 U.S.C. §103(a) and should be allowed.

Furthermore, if an independent claim is non-obvious under 35 U.S.C. §103, then any claim depending therefrom is non-obvious.<sup>1</sup> Claims 40 and 41 depend from non-obvious Claim 37 and therefore are non-obvious and should be allowed.

Claim 42 had been rejected under 35 U.S.C. §103(a) over Schneider et al. (US 4,834,793) in view of Kamiyama et al. (US 4,999,173). Claims 43 and 44 had been rejected under 35 U.S.C. §103(a) over Schneider et al. (US 4,834,793) in view of Kamiyama et al. (US 4,999,173), and further in view of Kawasumi et al. (US 4,450,188). These rejections are respectfully traversed for the following reasons.

Claims 42-44, as amended, comprise separating NO from N<sub>2</sub> by absorbing the NO from a mix of gases comprising N<sub>2</sub> and NO into a monovalent copper salt solution and denitrating the monovalent copper salt solution using a dosed supply of compressed air.

Such separating is not taught or suggested in Schneider, Kamiyama, Kawasumi, any other publication cited by the Examiner in this Office Action, or their combination. Therefore, Claims 40 and 41 are patentable and non-obvious over Schneider, Kamiyama, and Kawasumi under 35 U.S.C. §103(a) and should be allowed.

Furthermore, if an independent claim is non-obvious under 35 U.S.C. §103, then any claim depending therefrom is non-obvious.<sup>2</sup> Claims 42-44 depend from non-obvious Claim 37 and therefore are non-obvious and should be allowed.

It is believed that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited in this case. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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<sup>1</sup> In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

<sup>2</sup> In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

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